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3. REMARKS / DISCUSSION OF ISSUES

Claims 1, 2 and 4-18 are pending in the application. Claims 1, 10 and 13 are in independent form.

Unless indicated otherwise, claims are amended for non-statutory reasons: to correct one or more informalities, remove figure label number(s), and/or to replace European-style claim phraseology with American-style claim language.

I. Objection to the Drawings

The Examiner objects to the Figs. lacking labels in blocks and for illegible reference numeral. The replacement sheets filed herewith address the objections and render the objections moot.

Approval of the drawings and withdrawal of all objections to the drawings is earnestly solicited.

II. Objections to the Claims

Claims 1-18 were objected to for certain informalities. Wherever applicable, these claims have been amended as suggested by the Examiner. However, some suggested amendments were not made because it is believed that these changes were unnecessary or may render the claims unclear. Notably, the terms 'dc offset'; 'drift'; and 'demodulated signal' are definite in each claim. Furthermore, the term 'integrated over two bit periods' is described in the filed application at page 3. Thus, amendments to this term were not necessary.

Withdrawal of all objections to the claims is earnestly solicited.

Notably, claims 4, 6-9 and 15-18 were objected to and not rejected. Thus, it is respectfully submitted that the subject matter of these claims is allowable.

III. Rejections under 35 U.S.C. § 112

The Examiner rejects claim 10, and claims 11 and 12 by their dependence, under 35 U.S.C. § 112, first paragraph, as not being enabled. Claim 10 has been

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amended and includes "...selecting one of a plurality of preset default threshold values..." As such, it is respectfully submitted that this rejection is moot.

Claim 5 was rejected under 35 U.S.C. § 112, second paragraph, as lacking antecedent basis. This claim has been amended to recite 'a more recent bit period' and 'a preceding bit period.' Moreover, the temporal relation of these terms is described in the filed application. (See, for example, page 8, lines 6-11 of the filed application.) Therefore, it is respectfully submitted that this rejection is moot.

Withdrawal of the rejection of claims 5, 10-12 is respectfully requested. Furthermore, it is respectfully submitted that because the rejection of claim 10 is moot, claim 10 and the claims that depend therefrom are in condition for allowance. Allowance is earnestly solicited.

IV. Rejections under 35 U.S.C. § 102(b)

1. Claims 1, 3, 13 and 14 were rejected under 35 U.S.C. § 102(b) as being anticipated by *Wang, et al.* (U.S. Patent 5,459,762).

2. Claims 1, 2 and 13 were rejected under 35 U.S.C. § 102(b) as being anticipated by *Fumio Sugiyama* (translated version of reference AL of the IDS dated April 22, 2002.)

For at least the reasons set forth above, it is respectfully submitted that these rejections are improper and should be withdrawn.

A proper rejection under 35 U.S.C. § 102(b) requires that all of the claimed elements be found in the applied art. If a single claimed element is not found in the applied art, a prima facie case of anticipation cannot be properly established.

1. Claim 1, as amended, is drawn to a method and features, inter alia,

"...*intermittently integrating the demodulated bit stream over at least 2 bit periods;*

    comparing a result of the integrating with the selected threshold value; and

    using the result to update the selected threshold value."

In an embodiment, described on page 5, lines 5-16 of the filed application, the position determined by the switch 38 is also selected by the values of the bits B_{n-2},

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and B_{n-1}. Thus the threshold level being applied to the input 26 of the slicer 22 is also the level which is being updated by the signal S_n.

The Examiner relies on column 3, lines 36-50 of *Wang, et al.* in attempt to meet the referenced limitations. However, *Wang, et al.* describes locating groups of four threshold values in the table of Fig. 7, with the middle thresholds being fixed. The reference discloses estimating phase offsets and adjusting half of the thresholds based on the estimated phase offsets. However, the reference specifically lacks the disclosure of *comparing a result of the integrating with the selected threshold value; and using the result to update the selected threshold value* as specifically recited in claim 1.

For at least the reasons set forth above, it is respectfully submitted that the reference to *Wang, et al.* lacks at least one of the features of claim 1. As a result, a proper *prima facie* case of anticipation based on *Wang, et al.* has not been made and the rejection of claim 1 is improper and should be withdrawn. Therefore, claim 1 and the claims that depend therefrom are patentable over the applied art. Allowance is earnestly solicited.

Claim 13 is drawn to a receiver with a variable threshold slicer. Claim 13 features, inter alia, "...*means for using the current bit to update the selected threshold value*."

For reasons similar to those described in connection with claim 1, it is respectfully submitted that although *Wang, et al.* discloses estimating phase offsets and adjusting half of the thresholds based on the estimated phase offsets, it lacks the disclosure of the *using of the current bit to update the selected threshold value* as recited in claim 13.

For at least the reasons set forth above, it is respectfully submitted that the reference to *Wang, et al.* lacks at least one of the features of claim 13. As a result, a proper *prima facie* case of anticipation based on *Wang, et al.* has not been made and the rejection of claim 13 is improper and should be withdrawn. Therefore, claim 13 and the claims that depend therefrom are patentable over the applied art. Allowance is earnestly solicited.

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2. Claims 1 and 13 were also rejected in view of *Fumio Sagayama*. The Examiner relies on page 7, lines 17-18 of this reference in the rejection. The reference discloses feeding two bits into a first control circuit and four bits into a second control circuit. The first control circuit controls a switch for selecting a single threshold value. The second control circuit controls another switch for feeding signals into the respective threshold value generation circuits for 'threshold correction purposes.' It is unclear exactly how this threshold correction is effected or what is accomplished by the correction.

However, and significantly, the reference to *Fumio Sagayama* lacks at least the disclosure of *comparing a result of the integrating with the selected threshold value; and* **using the result to update the selected threshold value** as set forth in claim 1; and *means for using the current bit to update* **the selected threshold value** as set forth in claim 13.

For at least the reasons set forth above, it is respectfully submitted that the reference to *Fumio Sagayama* lacks at least one of the features of each of claims 1 and 13. As a result, a proper *prima facie* case of anticipation based on *Fumio Sagayama* has not been made and the rejection of claims 1 and 13 is improper and should be withdrawn. Therefore, claims 1 and 13 and the claims that depend therefrom are patentable over the applied art. Allowance is earnestly solicited.

V. Conclusion

In view of the foregoing, applicant(s) respectfully request(s) that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies to charge payment or credit any overpayment to Deposit Account

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Number 50-0238 for any additional fees, including, but not limited to, the fees under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17.

Respectfully submitted,

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2. Amendments to the Drawings

Six (6) sheets of drawings are attached including changes to include appropriate labels and reference numerals. These sheets include Figs. 1-7 and are intended to replace previously filed drawing sheets.

Attachment: Replacement Sheets (6)